

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

TRÖSCH, Hans-Ludwig
Tiedtke-Bühling-Kinne et al.
Bavariaring 4
D-80336 München
ALLEMAGNE

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APR 02 2002

Technology Center 2600

Date of mailing (day/month/year) 18 January 2002 (18.01.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference WO 24391	
International application No. PCT/EP99/04518	International filing date (day/month/year) 30 June 1999 (30.06.99)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

NOKIA NETWORKS OY
Keilalahdentie
FIN-02150 Espoo
Finland

State of Nationality

FI

State of Residence

FI

Telephone No.

+358 9 1807 0

Facsimile No.

+358 9 1807 496

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence

Name and Address

NOKIA CORPORATION
Keilalahdentie
FIN-02150 Espoo
Finland

State of Nationality

FI

State of Residence

FI

Telephone No.

+358 9 1807 0

Facsimile No.

+358 9 1807 496

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Beate GIFFO-SCHMITT

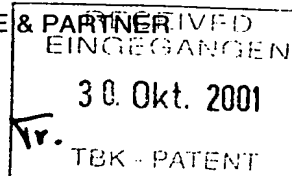
Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LESSON, Thomas J. A.
TIEDTKE, BÜHLING, KINNE & PARTNER
GBR
Bavariaring 4
D-80336 München
ALLEMAGNE



PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)

Date of mailing
(day/month/year) 29.10.2001

Applicant's or agent's file reference
WO 24391

IMPORTANT NOTIFICATION

International application No.
PCT/EP99/04518

International filing date (day/month/year)
30/06/1999

Priority date (day/month/year)
30/06/1999

Applicant
NOKIA NETWORKS OY et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer

Finnie, A

Tel. +49 89 2399-8251



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WO 24391	<div style="display: flex; justify-content: space-between;"> <div> FOR FURTHER ACTION </div> <div> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) </div> </div>	
International application No. PCT/EP99/04518	International filing date (<i>day/month/year</i>) 30/06/1999	Priority date (<i>day/month/year</i>) 30/06/1999
International Patent Classification (IPC) or national classification and IPC H04Q7/38		
Applicant NOKIA NETWORKS OY et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 16 sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 		
Date of submission of the demand 08/01/2001	Date of completion of this report 29.10.2001	
Name and mailing address of the international preliminary examining authority: <div style="display: flex; align-items: center;"> <div> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div> </div>	Authorized officer Forster, G Telephone No. +49 89 2399 8986	



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP99/04518

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1,2,5-15 as originally filed

3,4,4a-4c as received on 08/08/2001 with letter of 08/08/2001

Claims, No.:

1-33 as received on 08/08/2001 with letter of 08/08/2001

Drawings, sheets:

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP99/04518

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-33
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-33
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-33
	No:	Claims	

2. Citations and explanations
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP99/04518

to section V.

1. The present invention relates to a method for performing a communication between two terminal equipments, a method for performing a packet data multimedia communication between two terminal equipments, a device for performing a communication between two terminal equipments, a device for performing a packet data multimedia communication between two terminal equipments, a system in which a communication between two terminal equipments is performed and a system in which a packet data multimedia communication between two terminal equipments is performed, according to the features of the amended independent claims 1, 10, 12, 21, 23 and 32 respectively.

The closest prior art document is considered to be the document EP-A-0 841 763 (first document cited in the international search report) and is acknowledged in the opening part of the description.

2. According to the features of the independent claims the inventive step consists in the way of handling a communication connection in the case that one of the terminal equipments is moved into a second communication network having lower communication resources. Independent claims 1, 12 and 23 show one connection at the beginning and the establishing of a new connection for the specific component. In case of independent claims 10, 21 and 32 there are two connections at the beginning, cancelling of one connection in case of an handover and maintaining the other connection only for the specific component.

The underlying concept is not disclosed in or rendered obvious by the cited prior art documents. The subject-matter of the independent claims thus fulfils the requirements of Article 33 PCT.

3. The dependent claims contain further details on the subject-matter of the respective independent claims. These dependent claims merely limit the scope of protection sought by the independent claims and are therefore also considered to fulfil the requirements of Article 33 PCT.

PCT Patent Application No. PCT/EP99/04518
Nokia Networks Oy
WO 24391

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- 3531 Rec'd PCT 18 DEC 2001

handed over to is able to perform a videocall, at least the quality of service is getting worse.

Document EP-A-0 841 763 A1 describes a method of
5 controlling physical radio resources.

Furthermore, in document WO-A-97/09810, a method for multirate data communications in one communication network is described.

10

SUMMARY OF THE INVENTION

Therefore, it is an object of the present invention to provide a method and a corresponding device for handling a
15 multimedia call such as a videocall in different communication networks, which are free from the above mentioned drawbacks. Furthermore, a corresponding device is to be provided.

20 According to the present invention, this object is achieved by a method for performing a communication between two terminal equipments, said method comprising the steps of establishing a first connection for a communication signal between the two terminal equipments via a first
25 communication network, characterized by the steps of detecting a connection changing condition, said changing condition being a handover of one of said terminal equipments to a second communication network having lower communication resources, and, if said connection changing
30 condition is detected, dividing said communication signal at least into a first signal component and a second signal component, at least said second signal component being suitable for transmission in said second communication network and establishing at least one second connection
35 between said terminal equipments, said second signal

- 4 -

component being transmitted via said second connection to said one of said terminal equipments.

5 Additionally, this object is achieved, for example, by a method for performing a packet data multimedia communication between two terminal equipments, said method comprising the steps of establishing at least a first connection and a second connection for communication signal components between the two terminal equipments via a first
10 communication network, characterized by the steps of detecting a connection changing condition, said changing condition being a handover of one of said terminal equipments to a second communication network having lower communication resources, and, if said connection changing
15 condition is detected, canceling one of said at least first and second connections transmitting one communication signal component and maintaining the connection via the other one of said at least first and second connections transmitting the other signal component, wherein said other
20 signal component is suitable for transmission in said second communication network.

Furthermore, the present invention proposes a device for performing a communication between two terminal equipments,
25 said device comprising first establishing means for establishing a first connection for a communication signal between the two terminal equipments via a first communication network, characterized by comprising detecting means for detecting a connection changing
30 condition, said changing condition being a handover of one of said terminal equipments to a second communication network having lower communication resources, dividing means for dividing said communication signal at least into a first signal component and a second signal component, if
35 said detecting means detects said connection changing condition, at least said second signal component being

-4A-

suitable for transmission in said second communication network, and second establishing means for establishing at least one second connection between said terminal equipments, said second signal component being transmitted
5 via said second connection to said one of said terminal equipments.

Additionally, the present invention proposes a device for performing a packet data multimedia communication between
10 two terminal equipments, said device comprising establishing means for establishing at least a first connection and a second connection for communication signal components between the two terminal equipments via a first communication network, characterized by comprising
15 detecting means for detecting a connection changing condition, said changing condition being a handover of one of said terminal equipments to a second communication network having lower communication resources, and canceling means for canceling one of said at least first and second
20 connections transmitting one communication signal component while maintaining the connection via the other one of said at least first and second connections transmitting the other signal component, wherein said other signal component is suitable for transmission in said second communication
25 network.

Moreover, the present invention proposes a system in which a communication between two terminal equipments is performed, said system is adapted to establish a first
30 connection for a communication signal between the two terminal equipments via a first communication network, characterized in that the system is adapted to detect a connection changing condition, said changing condition being a handover of one of said terminal equipments to a
35 second communication network having lower communication resources, and, if said connection changing condition is

-4B-

- detected, divide said communication signal at least into a first signal component and a second signal component, at least said second signal component being suitable for transmission in said second communication network and
- 5 establish at least one second connection between said terminal equipments, said second signal component being transmitted via said second connection to said one of said terminal equipments.
- 10 Additionally, the present invention proposes a system in which a packet data multimedia communication between two terminal equipments is performed, said system being adapted to establish at least a first connection and a second connection for communication signal components between the
- 15 two terminal equipments via a first communication network, characterized in that said system is adapted to detect a connection changing condition, said changing condition being a handover of one of said terminal equipments to a second communication network having lower communication
- 20 resources, and, if said connection changing condition is detected, cancel one of said at least first and second connections transmitting one communication signal component and maintain the connection via the other one of said at least first and second connections transmitting the other
- 25 signal component, wherein said other signal component is suitable for transmission in said second communication network.

Advantageous further developments of the present invention

30 are as set out in the respective dependent claims.

According to the present invention, the proposed method and/or device and/or system allow to establish at least one second connection between the two terminal equipments or

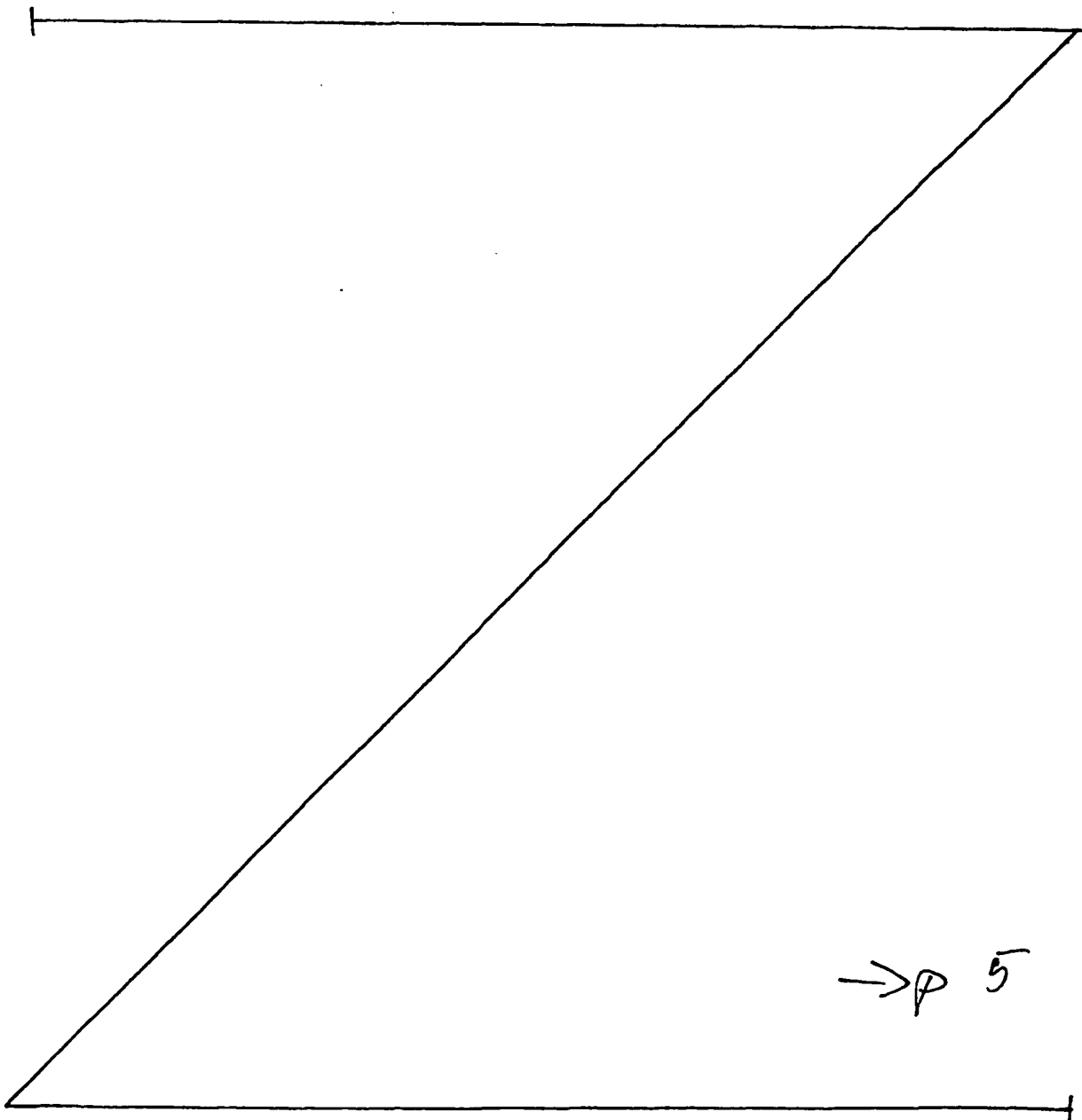
35 between a respective terminal equipment and a respective network, respectively. By using said second connection

-4C-

parallel to the first one, it is possible to transmit one component (for example a video component) of the original communication signal via the first connection and another component (for example a speech component) of the original communication signal via the second connection.

5 Advantageously, the video component can use the complete capacity of the first connection which improves the quality and robustness according for example H.324. On the other hand, the speech component transmitted via the second

10 connection is not affected by the video component which



→ p 5

531 Rec'd PCT/PT 18 DEC 2001

Enclosure of August 8, 2001

PCT Patent Application No.: PCT/EP99/04518
NOKIA NETWORKS OY
Our ref.: WO 24391

5

NEW CLAIMS 1 TO 33

10

1. A method for performing a communication between two terminal equipments (TE1, TE2),

said method comprising the steps of:

establishing (S2) a first connection for a

15 communication signal (V/S) between the two terminal equipments (TE1, TE2) via a first communication network (NW1),

characterized by the steps of:

20 detecting (S3) a connection changing condition, said changing condition being a handover of one of said terminal equipments (TE2) to a second communication network (NW2) having lower communication resources, and,

if said connection changing condition is detected, dividing (S4) said communication signal (V/S) at least into
25 a first signal component (V) and a second signal component (S), at least said second signal component being suitable for transmission in said second communication network (NW2) and

establishing (S5) at least one second connection
30 between said terminal equipments (TE1, TE2), said second signal component (S) being transmitted via said second connection to said one of said terminal equipments (TE2).

2. A method according to claim 1, further comprising the
35 steps of:

canceling (S7) the first connection transmitting the first signal component (V), and

- 2/11 -

maintaining the communication via the second connection transmitting the second signal component (S).

3. A method according to claim 2, further comprising the
5 steps of:

reestablishing (S10) the first connection canceled in said canceling step (S7), when said changing condition is dropped (S9), and

performing the communication via the first connection
10 transmitting the first signal component (V) and the second connection transmitting the second signal component (S).

4. A method according to claim 2, further comprising the steps of:

15 reestablishing (S10) the first connection canceled in said canceling step (S7), when said changing condition is dropped (S9),

rebuilding (S11) the communication signal (V/S) from the first signal component (V) and the second signal
20 component (S), and

performing the communication via the first connection transmitting the communication signal (V/S) rebuilt in said rebuilding step (S11).

25 5. A method according to claim 1, further comprising the steps of:

maintaining (S13) the communication via the first and the second connection transmitting the first and the second signal component (V, S),

30 rebuilding (S15) the communication signal (V/S) from the first signal component (V) and the second signal component (S),

canceling (S16) the second connection, and

transmitting the rebuilt communication signal (V/S)
35 via the first connection.

- 3/11 -

6. A method according to claim 1, wherein said communication signal (V/S) is a videotelephony signal.
- 5 7. A method according to claim 6, wherein said first signal component (V) is a video signal component and said second signal component (S) is a speech component.
8. A method according to claim 1, wherein said handover is
10 performed when at least one of said terminal equipments (TE1, TE2) leaves a communication area of a first communication network (NW1) and enters a communication area of a second communication network (NW2).
- 15 9. A method according to claim 8, wherein communication signals of a first format are used in said first communication area (NW1) and communication signals of a second format are used in said second communication area (NW2),
20 said method further comprising the step of changing (S8) the communication signal (V/S) or the first signal component (V) or the second signal component (S) from one of said first or second format into the respective other of the first or second format.
- 25 10. A method for performing a packet data multimedia communication between two terminal equipments (TE1, TE2), said method comprising the steps of:
establishing at least a first connection and a second
30 connection for communication signal components (V, S) between the two terminal equipments (TE1, TE2) via a first communication network (NW1),
characterized by the steps of:
detecting a connection changing condition, said
35 changing condition being a handover of one of said terminal

- 4/11 -

equipments (TE2) to a second communication network (NW2) having lower communication resources, and,

if said connection changing condition is detected, canceling one of said at least first and second connections
5 transmitting one communication signal component (V) and maintaining the connection via the other one of said at least first and second connections transmitting the other signal component (S), wherein said other signal component (S) is suitable for transmission in said second
10 communication network (NW2).

11. A method according to claim 10, further comprising the steps of:

reestablishing the connection canceled in said
15 canceling step, when said changing condition is dropped, and

performing the communication via the at least first and second connections transmitting the communication signal components (V, S).

20

12. A device for performing a communication between two terminal equipments (TE1, TE2),

said device (100) comprising:

first establishing means (110) for establishing a
25 first connection for a communication signal (V/S) between the two terminal equipments (TE1, TE2) via a first communication network (NW1),

characterized by comprising:

detecting means (120) for detecting a connection
30 changing condition, said changing condition being a handover of one of said terminal equipments (TE2) to a second communication network (NW2) having lower communication resources,

dividing means (130) for dividing said communication
35 signal (V/S) at least into a first signal component (V) and

- 5/11 -

a second signal component (S), if said detecting means (120) detects said connection changing condition, at least said second signal component being suitable for transmission in said second communication network (NW2),
5 and

second establishing means (110) for establishing at least one second connection between said terminal equipments (TE1, TE2), said second signal component (S) being transmitted via said second connection to said one of
10 said terminal equipments (TE2).

13. A device (100) according to claim 12, comprising canceling means (140) for canceling the first connection transmitting the first signal component (V),
15 said communication being maintained via the second connection transmitting the second signal component (S).

14. A device according to claim 13, comprising reestablishing means (150) for reestablishing the
20 first connection canceled by said canceling means (140), when said changing condition is dropped, said communication being performed via the first connection transmitting the first signal component (V) and the second connection transmitting the second signal component (S).

25 15. A device (100) according to claim 13, comprising reestablishing means (150) for reestablishing the first connection canceled by said canceling means (140), when said changing condition is dropped, and
30 rebuilding means (160) for rebuilding the communication signal (V/S) from the first and the second signal component (V, S), said communication being performed via the first connection transmitting the communication signal (V/S) rebuilt by said rebuilding means (160).
35

- 6/11 -

16. A device according to claim 12, wherein the communication is maintained via the first and the second connection transmitting the first and the second signal component (V, S),

5 said device (100) comprising
 rebuilding means (160) for rebuilding the communication signal (V/S) from the first and the second signal component (V, S),

 canceling means (140) for canceling the second
10 connection, said communication being performed via the first connection transmitting the communication signal (V/S) rebuilt by said rebuilding means (160).

17. A device according to claim 12, wherein said
15 communication signal (V/S) is a videotelephony signal.

18. A device according to claim 17, wherein said first signal component (V) is a video signal component and said second signal component (S) is a speech component.

20

19. A device according to claim 12, wherein said handover is performed when at least one of said terminal equipments (TE1, TE2) leaves a communication area of a first communication network (NW1) and enters a communication area
25 of a second communication network (NW2).

20. A device according to claim 19, wherein communication signals of a first format are used in said first communication area (NW1) and communication signals of a
30 second format are used in said second communication area (NW2),

 said device (100) comprising
 changing means (170) for changing the communication signal (V/S) or the first signal component (V) or the
35 second signal component (S) from one of said first or

- 7/11 -

second format into the respective other of the first or second format.

21. A device for performing a packet data multimedia

5 communication between two terminal equipments (TE1, TE2),
said device comprising:

establishing means for establishing at least a first
connection and a second connection for communication signal
components (V, S) between the two terminal equipments (TE1,
10 TE2) via a first communication network (NW1),

characterized by comprising:

detecting means for detecting a connection changing
condition, said changing condition being a handover of one
of said terminal equipments (TE2) to a second communication
15 network (NW2) having lower communication resources, and

canceling means for canceling one of said at least
first and second connections transmitting one communication
signal component (V) while maintaining the connection via
the other one of said at least first and second connections
20 transmitting the other signal component (S), wherein said
other signal component (S) is suitable for transmission in
said second communication network (NW2).

22. A device according to claim 21, further comprising:

25 reestablishing means for reestablishing the connection
canceled by said canceling means, when said changing
condition is dropped, said packet data communication being
performed via the at least first and second connections
transmitting the communication signal components (V, S).

30

23. A system in which a communication between two terminal
equipments (TE1, TE2) is performed,

said system is adapted to:

- 8/11 -

establish (S2) a first connection for a communication signal (V/S) between the two terminal equipments (TE1, TE2) via a first communication network (NW1),

characterized in that the system is adapted to

5 detect (S3) a connection changing condition, said changing condition being a handover of one of said terminal equipments (TE2) to a second communication network (NW2) having lower communication resources, and,

if said connection changing condition is detected,

10 divide (S4) said communication signal (V/S) at least into a first signal component (V) and a second signal component (S), at least said second signal component being suitable for transmission in said second communication network (NW2) and

15 establish (S5) at least one second connection between said terminal equipments (TE1, TE2), said second signal component (S) being transmitted via said second connection to said one of said terminal equipments (TE2).

20 24. A system according to claim 23, further adapted to:
cancel (S7) the first connection transmitting the first signal component (V), and

maintain the communication via the second connection transmitting the second signal component (S).

25

25. A system according to claim 24, further adapted to:
reestablish (S10) the canceled first connection, when said changing condition is dropped (S9), and

perform the communication via the first connection
30 transmitting the first signal component (V) and the second connection transmitting the second signal component (S).

26. A system according to claim 24, further adapted to:

- 9/11 -

reestablish (S10) the first connection canceled in said canceling step (S7), when said changing condition is dropped (S9),

rebuild (S11) the communication signal (V/S) from the
5 first signal component (V) and the second signal component (S), and

perform the communication via the first connection transmitting the communication signal (V/S) rebuilt in said rebuilding step (S11).

10

27. A system according to claim 23, further adapted to:

maintain (S13) the communication via the first and the second connection transmitting the first and the second signal component (V, S),

15 rebuild (S15) the communication signal (V/S) from the first signal component (V) and the second signal component (S),

cancel (S16) the second connection, and

transmit the rebuilt communication signal (V/S) via
20 the first connection.

28. A system according to claim 23, wherein said communication signal (V/S) is a videotelephony signal.

25 29. A system according to claim 28, wherein said first signal component (V) is a video signal component and said second signal component (S) is a speech component.

30 30. A system according to claim 23, further adapted to perform said handover when at least one of said terminal equipments (TE1, TE2) leaves a communication area of a first communication network (NW1) and enters a communication area of a second communication network (NW2).

- 10/11 -

31. A system according to claim 30, wherein communication signals of a first format are used in said first communication area (NW1) and communication signals of a second format are used in said second communication area

5 (NW2),

said system is adapted to

change (S8) the communication signal (V/S) or the first signal component (V) or the second signal component (S) from one of said first or second format into the

10 respective other of the first or second format.

32. A system in which a packet data multimedia communication between two terminal equipments (TE1, TE2) is performed,

15 said system being adapted to:

establish at least a first connection and a second connection for communication signal components (V, S) between the two terminal equipments (TE1, TE2) via a first communication network (NW1),

20 characterized in that said system is adapted to

detect a connection changing condition, said changing condition being a handover of one of said terminal equipments (TE2) to a second communication network (NW2) having lower communication resources, and,

25 if said connection changing condition is detected, cancel one of said at least first and second connections transmitting one communication signal component (V) and maintain the connection via the other one of said at least first and second connections transmitting the other signal component (S), wherein said other signal component (S) is
30 suitable for transmission in said second communication network (NW2).

33. A system according to claim 32, further adapted to:

- 11/11 -

reestablish the connection canceled in said canceling step, when said changing condition is dropped, and

perform the communication via the at least first and second connections transmitting the communication signal
5 components (V, S).

PCT REQUEST

WO 24391

Original (for SUBMISSION) - printed on 30.06.1999 03:29:00 PM

0	For receiving Office use only	
0-1	International Application No.	
0-2	International Filing Date	
0-3	Name of receiving Office and "PCT International Application"	
0-4	Form - PCT/RO/101 PCT Request	
0-4-1	Prepared using	PCT-EASY Version 2.84 (updated 01.04.1999)
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	European Patent Office (EPO) (RO/EP)
0-7	Applicant's or agent's file reference	WO 24391
I	Title of invention	METHOD AND DEVICE FOR HANDLING A MULTIMEDIA CALL
II	Applicant	
II-1	This person is:	applicant only
II-2	Applicant for	all designated States except US
II-4	Name	NOKIA TELECOMMUNICATIONS OY
II-5	Address:	Keilalahdentie FIN-02150 Espoo Finland
II-6	State of nationality	FI
II-7	State of residence	FI
II-8	Telephone No.	+358 9 1807 0
II-9	Facsimile No.	+358 9 1807 496
III-1	Applicant and/or inventor	
III-1-1	This person is:	applicant and inventor
III-1-2	Applicant for	US only
III-1-4	Name (LAST, First)	KALL, Jan
III-1-5	Address:	Jupperinmetsä 2B FIN-02730 Espoo Finland
III-1-6	State of nationality	FI
III-1-7	State of residence	FI

PCT REQUEST

WO 24391

Original (for SUBMISSION) - printed on 30.06.1999 03:29:00 PM

III-2	Applicant and/or inventor	
III-2-1	This person is:	applicant and inventor
III-2-2	Applicant for	US only
III-2-4	Name (LAST, First)	MUHONEN, Ahti
III-2-5	Address:	c/o Nokia Telecommunications Oy Keilalahdentie 4 FIN-02150 Espoo Finland
III-2-6	State of nationality	FI
III-2-7	State of residence	FI
III-3	Applicant and/or inventor	
III-3-1	This person is:	applicant and inventor
III-3-2	Applicant for	US only
III-3-4	Name (LAST, First)	SALONEN, Jouni
III-3-5	Address:	c/o Nokia Telecommunications Oy Keilalahdentie 4 FIN-02150 Espoo Finland
III-3-6	State of nationality	FI
III-3-7	State of residence	FI
III-4	Applicant and/or inventor	
III-4-1	This person is:	applicant and inventor
III-4-2	Applicant for	US only
III-4-4	Name (LAST, First)	HONKO, Harri
III-4-5	Address:	c/o Nokia Telecommunications Oy Keilalahdentie 4 FIN-02150 Espoo Finland
III-4-6	State of nationality	FI
III-4-7	State of residence	FI
IV-1	Agent or common representative; or address for correspondence	
	The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent
IV-1-1	Name (LAST, First)	TRÖSCH, Hans-Ludwig
IV-1-2	Address:	Tiedtke-Bühling-Kinne et al. Bavariaring 4 D-80336 München Germany
IV-1-3	Telephone No.	+49 89 544690
IV-1-4	Facsimile No.	+49 89 532611
IV-1-5	e-mail	postoffice tbk-patent.com

PCT REQUEST

WO 24391

Original (for SUBMISSION) - printed on 30.06.1999 03:29:00 PM

IV-2	Additional agent(s)	additional agent(s) with same address as first named agent
IV-2-1	Name(s)	TIEDTKE, Harro; BÜHLING, Gerhard; KINNE, Reinhard; GRAMS, Klaus; LINK, Annette; VOLLNHALS, Aurel; LESON, Thomas, Johannes, Alois; PELLMANN, Hans-Bernd; CHIVAROV, Georgi; GRILL, Matthias; KÜHN, Alexander; OSER, Andreas; BÖCKELEN, Rainer
V	Designation of States	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p>AP: GH GM KE LS MW SD SZ UG ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT</p> <p>EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT</p> <p>EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT</p> <p>OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT</p>
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p>AE AL AM AT AU AZ BA BB BG BR BY CA CH&LI CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW</p>
V-5	Precautionary Designation Statement In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	
V-6	Exclusion(s) from precautionary designations	NONE
VI	Priority claim	NONE
VII-1	International Searching Authority Chosen	European Patent Office (EPO) (ISA/EP)

PCT REQUEST

WO 24391

Original (for SUBMISSION) - printed on 30.06.1999 03:29:00 PM

VIII	Check list	number of sheets	electronic file(s) attached
VIII-1	Request	4	-
VIII-2	Description	15	-
VIII-3	Claims	10	-
VIII-4	Abstract	1	wo24391a.txt
VIII-5	Drawings	6	-
VIII-7	TOTAL	36	
	Accompanying items	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-18	Figure of the drawings which should accompany the abstract	3	
VIII-19	Language of filing of the international application	English	
IX-1	Signature of applicant or agent		
IX-1-1	Name (LAST, First)	TRÖSCH, Hans-Ludwig	

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/EP
10-6	Transmittal of search copy delayed until search fee is paid	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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INTERNET COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LESSON, Thomas J. A.
TIEDTKE, BÜHLING, KINNE & PARTNER
GBR
Bavariaring 4
D-80336 München
ALLEMAGNE

EINGEGANGEN
Patentanwälte
14. Mai 2001
TIEDTKE · BÜHLING · KINNE
& PARTNER (GmbH)

EINGEGANGEN
Patentanwälte
14. Mai 2001
TIEDTKE · BÜHLING · KINNE
& PARTNER (GmbH)

PCT

WRITTEN OPINION

(PCT Rule 66)

Date of mailing
(day/month/year) 11.05.2001

Applicant's or agent's file reference
WO 24391

REPLY DUE within 3 month(s)
from the above date of mailing

International application No.
PCT/EP99/04518

International filing date (day/month/year)
30/06/1999

Priority date (day/month/year)
30/06/1999

International Patent Classification (IPC) or both national classification and IPC
H04Q7/38

Applicant

NOKIA NETWORKS OY et al.

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain document cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30/10/2001.

Friedrich 11.8.01 ✓

WVA 11.6. ✓

Name and mailing address of the international preliminary examining authority:

 European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Forster, G

Formalities officer (incl. extension of time limits)

Finnie, A

Telephone No. +49 89 2399 8251



I. Basis of the opinion

1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"):

Description, pages:

1-15 as originally filed

Claims, No.:

1-45 as originally filed

Drawings, sheets:

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

WRITTEN OPINION

International application No. PCT/EP99/04518

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	12
Inventive step (IS)	Claims	1-11, 13-45
Industrial applicability (IA)	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

to section V.

1. Reference is made to the following documents cited in the international search report.

D1 := EP-A-0 841 763

D2 := WO-A-97 09810

- 2.1 Document D1 (cf. abstract), which is considered to represent the most relevant state of the art, already discloses according to the features of claim 12, a method for performing packet data communication between two terminal equipments via at least one communication network (cf. column 11, line 47 to column 12, line 5; column 21, lines 34 to 36 and claim 42), the method comprising the steps of establishing at least a first connection and a second connection for communication signal components between the two terminal equipments, detecting a connection changing condition (cf. column 14, line 24 to column 15, line 17), and if said connection changing condition is detected cancelling one of said at least first and the second connections transmitting one communication signal component (cf. column 13, lines 6 to 22).

Therefore claim 12 does not satisfy the criterion set forth in Article 33(2) PCT because its subject-matter is not new in respect of the prior art as defined in the regulations (Rule 64(1)-(3) PCT).

Furthermore, it should be noted that even if novelty of claim 12 could be argued, based on minor differences between the features of said claim and those disclosed in document D1 (cf. same citations stated above), the subject-matter of claim 12 would not involve an inventive step, (Rule 65(1)(2) PCT), having regard to the disclosure of document D2 (cf. page 3, lines 9 to 17; page 4, lines 21 to 31; page 5, lines 16 to 27 and page 7, lines 17 to 21) especially as this document discloses the same object and the same type of solution as claimed in claim 12.

- 2.2 The differences between the subject-matter of claim 1 and that of independent claim 12 relate, as stated later in section VIII, paragraph 1, only to minor details

and are either directly derivable from the above mentioned prior art documents or lie well within the normal design competence of a person skilled in the art. Claim 1, in addition to the above raised clarity and conciseness objection, therefore appears to contain nothing of inventive significance, contrary to Article 33(3) PCT.

- 3.1 Furthermore, independent claim 27 contains the corresponding features of claim 12 merely in terms of an apparatus claim. Therefore the subject-matter of claim 27 does not appear to involve an inventive step (Rule 65(1)(2) PCT) and thus does not satisfy the criterion set forth in Article 33(3) PCT.
- 3.2 The differences between the subject-matter of independent claim 16 and that of independent claim 27 relate, as stated later in section VIII, paragraph 1, only to minor details and are either directly derivable from the above mentioned prior art documents or lie well within the normal design competence of a person skilled in the art. Claim 16, in addition to the above raised clarity and conciseness objection, therefore appears to contain nothing of inventive significance, contrary to Article 33(3) PCT.
- 4.1 Independent claim 42 seeks protection for a system for performing a communication. This claim does not involve an inventive step because it represents a mere aggregation of features, which have been shown to be not new or to comprise nothing of inventive significance. Such a mere aggregation of features can be readily realised by a skilled person within a routine design activity. It can not be seen that the claimed combination of features requires an activity which goes beyond the normal design competence that can be expected from a skilled person and that the combination attributes a particular advantage unexpected to a skilled person. Therefore claim 42 does not satisfy the criterion set forth in Article 33(3) PCT because the subject-matter of this claim does not involve an inventive step (Rule 65(1)(2) PCT).
- 4.2 Again, the differences between the subject-matter of independent claim 31 and that of independent claim 42 relate, as stated later in section VIII, paragraph 1, only to minor details and are either directly derivable from the above mentioned prior art documents or lie well within the normal design competence of a person skilled in the art. Claim 31, in addition to the above raised clarity and conciseness

objection, therefore appears to also contain nothing of inventive significance, contrary to Article 33(3) PCT.

5. The additional features of the dependent claims relate to minor details and are either directly derivable from the above mentioned prior art documents or represent simple modifications of the prior art and thus lie within the normal design competence of a skilled person. These claims therefore, either alone or in combination appear to add nothing of inventive significance to the respective independent claims and thus do not satisfy the criterion set forth in Article 33(3) PCT.
6. If the applicant intends to proceed further with the present application then three new independent claims should be filed, one for a method, one for a device and one for the system for performing a communication, setting out what is considered to be the inventive contribution to the art. Care should be taken to ensure that the wording of a claim leaves no doubt as to its category, Article 6 PCT and to ensure that no subject-matter is added which extends beyond the content of the application as originally filed, Article 34(2)(b) PCT.

The applicant is requested to file amendments by way of replacement pages. He should also take into account the requirements of Rule 66.8 PCT. In particular, fair copies of the amendments should preferably be filed in triplicate. The applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

Remark:

If during the procedure any amendments concerning the claims are made e.g. introducing subject-matter into the present claims or filing new claims, then it is requested that the applicant in his letter of reply should clearly indicate the parts of the originally filed application serving as a basis for the filed amendments and indicate where these parts can be found. This is necessary to ensure beyond doubt that no subject-matter has been added which extends beyond the content of the application as originally filed, Article 34(2)(b) PCT, rendering all amendments made invalid.

to section VII.

1. In order to meet the requirements of Rule 5.1(a)(ii) PCT, the cited documents D1 and D2 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.
2. The description should be modified to bring it into agreement with any amended independent claims, Rule 5.1(a)(iii) PCT. Care should be taken during revision, especially of the introductory portion including any statement of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed, Article 34(2)(b) PCT.

to section VIII.

1. The application contains two independent method claims concerning a method for performing a communication (claims 1 and 12), two independent apparatus claims concerning a device for performing a communication (claims 16 and 27) and two independent claims concerning a system for performing a communication (claims 31 and 42) of overlapping scope such that the requirements of Article 6 PCT regarding conciseness and clarity of the claims as a whole are not met. The subject-matter set out in these claims relates to embodiments having the same essential technical features and differing only in minor details. It is requested that the claims should therefore be recast to include only one independent claim for the method, one independent claim for the device and one independent claim for the system with dependent claims as appropriate (Rule 6.4(a)-(c) PCT).
2. The dependent claims 40 and 41 do not meet the requirements of Article 6 PCT with respect to clarity, because they mix categories. A method claim can not depend on an apparatus claim. In order to meet the requirements of Article 6 PCT with respect to clarity, the wording of the two claims should read 'A system according to claim 33 ...' and 'A system according to claim 40 ...' and the features defined in these two dependent claims should be clearly defined in terms of apparatus features and not by a process.

PATENT COOPERATION TREATY

PCT

INFORMATION CONCERNING ELECTED
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

LESON, Thomas, Johannes, Alois
Tiedtke-Bühling-Kinne & Partner GbR
TBK-Patent
Bavariaring 4
80336 München
ALLEMAGNE

EINGEGANGEN
Patentanwälte

- 5. April 2001

TIEDTKE · BÜHLING · KINNE
& PARTNER (GbR)

Date of mailing (day/month/year) 26 March 2001 (26.03.01)		
Applicant's or agent's file reference WO 24391		IMPORTANT INFORMATION
International application No. PCT/EP99/04518	International filing date (day/month/year) 30 June 1999 (30.06.99)	
Priority date (day/month/year)		
Applicant NOKIA NETWORKS OY et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

AP : GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

National : AU, BG, CA, CN, CZ, DE, IL, JP, KP, KR, MN, NO, NZ, PL, RO, RU, SE, SK, US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

OA : BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

National : AE, AL, AM, AT, AZ, BA, BB, BR, BY, CH, CU, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR,

HU, ID, IN, IS, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MW, MX, PT, SD, SG, SI, SL,

TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer: Claudio Borton Telephone No. (41-22) 338.83.38
--	--

PATENT COOPERATION TREATY

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

TRÖSCH, Hans-Ludwig
Tiedtke-Bühling-Kinne et al.
Bavariaring 4
D-80336 München

ALLEMAGNE **Patentanwälte**

19. Jan. 2001

TIEDTKE · BÜHLING · KINNE
& PARTNER (GmbH)

Date of mailing (day/month/year) 11 January 2001 (11.01.01)		IMPORTANT NOTICE	
Applicant's or agent's file reference WO 24391			
International application No. PCT/EP99/04518	International filing date (day/month/year) 30 June 1999 (30.06.99)	Priority date (day/month/year)	
Applicant NOKIA NETWORKS OY et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU, KP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AL, AM, AP, AT, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EA, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, OA, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on
11 January 2001 (11.01.01) under No. WO 01/03461

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference WO 24391	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 99/ 04518	International filing date (day/month/year) 30/06/1999	(Earliest) Priority Date (day/month/year)
Applicant NOKIA NETWORKS OY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

3

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 99/04518

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04Q7/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EP 0 841 763 A (NOKIA MOBILE PHONES LTD) 13 May 1998 (1998-05-13)</p> <p>column 11, line 47 - column 12, line 5 column 13, line 6 - line 22 column 14, line 24 - line 32 column 14, line 48 - line 51 column 15, line 1 - line 17 column 21, line 34 - line 36; claim 42</p> <p style="text-align: center;">--- -/--</p>	<p>1, 8, 9, 12, 16, 19, 23, 24, 27, 31, 34, 38, 39, 42</p>

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"A" document member of the same patent family

Date of the actual completion of the international search

18 February 2000

Date of mailing of the international search report

28/02/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5618 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rothlübbers, C

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 99/04518

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 09810 A (MOTOROLA INC) 13 March 1997 (1997-03-13) page 3, line 9 - line 17 page 4, line 21 - line 31 page 5, line 16 - line 27 page 7, line 17 - line 21 -----	1,2,12, 13,16, 17,27, 28,31, 32,42,43
E	WO 99 52307 A (ERICSSON TELEFON AB L M) 14 October 1999 (1999-10-14) page 4, line 17 - line 19 page 6, line 5 - line 17 page 7, line 9 - line 12 page 29, line 15 - line 23 -----	1,2,8,9, 12,13, 27,28, 42,43

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/04518

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0841763	A	13-05-1998	FI 964308 A	26-04-1998
			BR 9705138 A	18-05-1999
			JP 10190621 A	21-07-1998
WO 9709810	A	13-03-1997	US 5974106 A	26-10-1999
			EP 0847641 A	17-06-1998
WO 9952307	A	14-10-1999	AU 3857199 A	25-10-1999

PATENT COOPERATION TREATY

EINGEGANGEN

Patentanwälte

10. DEZ. 1999

TIEDTKE - BÄHLING - KINNE
& PARTNER

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

TRÖSCH, Hans-Ludwig
Tiedtke-Bähling-Kinne et al.
Bavariaring 4
D-80336 München
ALLEMAGNE

Date of mailing (day/month/year) 06 December 1999 (06.12.99)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference WO 24391	
International application No. PCT/EP99/04518	International filing date (day/month/year) 30 June 1999 (30.06.99)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address NOKIA TELECOMMUNICATIONS OY Keilalahdentie FIN-02150 Espoo Finland	State of Nationality FI	State of Residence FI
	Telephone No. +358 9 1807 0	
	Facsimile No. +358 9 1807 496	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence

Name and Address NOKIA NETWORKS OY Keilalahdentie FIN-02150 Espoo Finland	State of Nationality FI	State of Residence FI
	Telephone No. +358 9 1807 0	
	Facsimile No. +358 9 1807 496	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒ the receiving Office ☐ the designated Offices concerned
☒ the International Searching Authority ☐ the elected Offices concerned
☐ the International Preliminary Examining Authority ☐ other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer G. Bähr
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

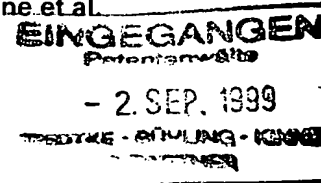
PCT

NOTIFICATION OF RECEIPT OF
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

TRÖSCH, Hans-Ludwig
Tiedtke-Bähling-Kinne et al.Bavariaring 4
D-80836 München
ALLEMAGNE

Date of mailing (day/month/year) 24 August 1999 (24.08.99)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference WO 24391	International application No. PCT/EP99/04518

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

NOKIA TELECOMMUNICATIONS OY (for all designated States except US)

KALL, Jan et al (for US)

International filing date : 30 June 1999 (30.06.99)
 Priority date(s) claimed :
 Date of receipt of the record copy : 05 August 1999 (05.08.99)
 by the International Bureau :
 List of designated Offices :

AP : GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW

EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

OA : BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

National : AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- ☒ time limits for entry into the national phase
☐ confirmation of precautionary designations
☐ requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer:

G. Bähr

Telephone No. (41-22) 338.83.38

INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated in the Notification of Receipt of Record Copy (Form PCT/IB/301) by paying national fees and furnishing translations, as prescribed by the applicable national laws.

The time limit for performing these procedural acts is **20 MONTHS** from the priority date or, for those designated States which the applicant elects in a demand for international preliminary examination or in a later election, **30 MONTHS** from the priority date, provided that the election is made before the expiration of 19 months from the priority date. Some designated (or elected) Offices have fixed time limits which expire even later than 20 or 30 months from the priority date. In other Offices an extension of time or grace period, in some cases upon payment of an additional fee, is available.

In addition to these procedural acts, the applicant may also have to comply with other special requirements applicable in certain Offices. It is the applicant's responsibility to ensure that the necessary steps to enter the national phase are taken in a timely fashion. Most designated Offices do not issue reminders to applicants in connection with the entry into the national phase.

For detailed information about the procedural acts to be performed to enter the national phase before each designated Office, the applicable time limits and possible extensions of time or grace periods, and any other requirements, see the relevant Chapters of Volume II of the PCT Applicant's Guide. Information about the requirements for filing a demand for international preliminary examination is set out in Chapter IX of Volume I of the PCT Applicant's Guide.

GR and ES became bound by PCT Chapter II on 7 September 1996 and 6 September 1997, respectively, and may, therefore, be elected in a demand or a later election filed on or after 7 September 1996 and 6 September 1997, respectively, regardless of the filing date of the international application. (See second paragraph above.)

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

CONFIRMATION OF PRECAUTIONARY DESIGNATIONS

This notification lists only specific designations made under Rule 4.9(a) in the request. It is important to check that these designations are correct. Errors in designations can be corrected where precautionary designations have been made under Rule 4.9(b). The applicant is hereby reminded that any precautionary designations may be confirmed according to Rule 4.9(c) before the expiration of 15 months from the priority date. If it is not confirmed, it will automatically be regarded as withdrawn by the applicant. There will be no reminder and no invitation. Confirmation of a designation consists of the filing of a notice specifying the designated State concerned (with an indication of the kind of protection or treatment desired) and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.

REQUIREMENTS REGARDING PRIORITY DOCUMENTS

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 16 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 16-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 16-month time limit and may be subjected by the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity to furnish the priority document within a time limit which is reasonable under the circumstances.

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 16-month time limit is the filing date of the earliest application whose priority is claimed.